DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Shun Yao on 8/12/2008.

The application has been amended as follows:

In the specification page 8 lines 8-9paragraph 35:

[0035] The data structures and code described in this detailed description are typically stored on a computer readable storage medium, which may be any device or medium that can store code and/or data for use by a computer system. This includes, but is not limited to, application specific integrated circuits (ASICs), field-programmable gate arrays (FPGAs), semiconductor memories, magnetic and optical storage devices such as disk drives, magnetic tape, CDs (compact discs) and DVDs (digital versatile discs or digital video discs), and computer instruction signals embodied in a transmission medium ~~(with or without a carrier wave upon which the signals are modulated)~~.

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance:

The prior art of record fail to teach a combinational limitations of a switching packets in a passive optical network which includes a central node and at least one remote node,

comprising:

receiving a packet at the central node; obtaining a first set of results by performing a first lookup based on a first set of values which include a virtual local area network (VLAN) identifier of the

wherein the first lookup involves directly addressing a direct- search table by offsetting one or more base addresss based on the first set of values;

wherein the direct-search table is divided into sub-tables, each of which starts at a corresponding base address;

wherein a subset of the sub-tables are used if the packet is an upstream packet;

wherein a subset of the sub-tables are used if the packet is a downstream packet;

obtaining a second set of results by performing a second lookup based on a second set of values derived from the packet;

producing a merged value by merging the first set of results and the second set of results;

obtaining a subsequent result by performing a subsequent lookup with the merged value; and

if the packet is a downstream packet,

deriving a logical identifier corresponding to one or more remote nodes from the subsequent result,

incorporating the logical identifier into the packet, and

transmitting the packet to one or more remote nodes.

Pullela (US7313667) and Sala (US20030117998) teaches

receiving a packet at the central node; obtaining a first set of results by performing a first lookup based on a first set of values derived from the packet; obtaining a second set of results by performing a second lookup based on a second set of values derived from the packet; producing a merged value by merging the first set of results and the second set of results; obtaining a subsequent result by performing a subsequent lookup with the merged value; and if the packet is a downstream packet, deriving a logical identifier corresponding to one or more remote nodes from the subsequent result, incorporating the logical identifier into the packet, and transmitting the packet to one or more remote nodes.

However, they fail to teach the newly added limitations of:

wherein the first lookup involves directly addressing a direct-search table by offsetting one or more base addresss based on the first set of values;

wherein the direct-search table is divided into sub-tables, each of which starts at a corresponding base address;

wherein a subset of the sub-tables are used if the packet is an upstream packet;

wherein a subset of the sub-tables are used if the packet is a downstream packet;

Therefore, claims 1, 5-16, 20-31, and 35-45 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WUTCHUNG CHU whose telephone number is (571)270-1411. The examiner can normally be reached on Monday - Friday 1000 - 1500EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571 272 7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WC/
Wutchung Chu

/Edan Orgad/
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